

REMARKS

Claims 1-69 and 76-77 were presented for examination in the present application. The instant amendment cancels claim 4 without prejudice. Thus, claims 1-3, 5-69, and 76-77 remain pending for consideration upon entry of the instant amendment, where claims 1, 36, 44, 45, 61, 66, 67, 68, and 69 are independent.

Claims 76 and 77 have been withdrawn as being directed to a non-elected species, but remain pending for rejoinder upon allowance of a generic claim, where claims 1-40, 42-58, and 60-69 are generic.

Applicants note with appreciation the indication of allowable subject matter in claims 36, 44-45, and 69. Claim 36 has been amended into independent form, namely to include elements of claims 1 and 34. Claims 44 and 45 have each been amended into independent form, namely to include elements of claims 1 and 43. Accordingly, claims 36, 44-45, and 69 are in condition for issuance.

Claims 1, 4-26, 46-65, and 68 were rejected on the ground of non-statutory obviousness-type double patenting over U.S. Application Serial No. 10/527,520 and U.S. Patent No. 7,018,727. Applicants submit herewith a terminal disclaimer for both the '520 application and the '727 patent to obviate this rejection. Accordingly, reconsideration and withdrawal of the double patenting rejection to claims 1, 4-26, 46-65, and 68 are respectfully requested.

In view of the obviation of the double patenting rejections, Applicants submit that independent claim 61, as well as claims 62-65 that depend therefrom, are in condition for issuance.

The Office Action objected to claims 27 and 28. Claims 27 and 28 have been amended to correct the typographical error noted by the Examiner. Specifically, claims 27 and 28 have been amended to change "function" to "functional". It is submitted that

these amendments merely make explicit what had been implicit in the claims.

Independent claims 1, as well as dependent claims 3-13, 15-25, 43, 46-48, 52-58, and 60 were rejected under 35 U.S.C. §102 over U.S. Patent No. 4,643,951 to Keem et al. (Keem). Independent claims 1, 66, and 67, as well as dependent claims 2, 4-6, 8, 15-16, 18, 20-21, 26, 29-35, and 37-42, were rejected under 35 U.S.C. §102 over U.S. Patent No. 5,930,046 to Solberg et al. (Solberg). Independent claims 1 and 68, as well as dependent claims 2, 4-13, 16-25, 43, 46, 52-53, 56-60, and 68 were rejected under 35 U.S.C. §102 over U.S. Patent No. 6,579,590 to Ju et al. (Ju). Independent claim 1, as well as dependent claims 2, 4-10, 14-16, 18-22, 26-28, and 41-42, were rejected under 35 U.S.C. §103 over U.S. Patent No. 6,797,388 to Szanyi et al. (Szanyi).

Applicants respectfully submit that the amendments to independent claims 1, 66, 67, and 68 obviate these rejections.

Independent claims 1, 66, 67, and 68 have each been amended to recite that the at least one functional layer comprises “at least one chloride and at least one element selected from the group consisting of an oxide, a nitride, a carbide, a selenide, a telluride, and a sulfide (emphasis added)”.

Chlorides can have advantageous properties such as high UV transparency. However, in general, chlorides are structurally unstable. In particular, many chlorides are soluble in water or at least tend to incorporate water. Both effects are strongly temperature dependent. Incorporation of water, however, leads to structural or chemical changes of the layer. Coming along therewith, the optical thickness of the layer changes, thus resulting in its optical properties. This effect is particularly detrimental if the layer is part of an optical interference layer system, as a change in the optical thickness of a layer alters the transmission or reflection characteristics. The invention as defined in the claims provides a solution to produce chemically stable chloride containing layers.

None of the references cited, however, disclose or suggest the claimed functional layer that comprises "at least one chloride and at least one element selected from the group consisting of an oxide, a nitride, a carbide, a selenide, a telluride, and a sulfide (emphasis added)" as now recited by claims 1, 66, 67, and 68.

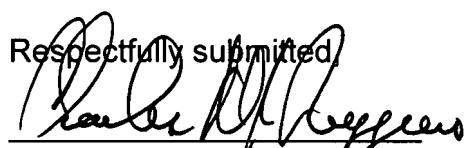
Accordingly, independent claims 1, 66, 67, and 68 are not disclosed or suggested by the cited art and, thus, are in condition for allowance. In addition, claims 2-3, 5-35, 37-43, and 46-60 that depend from claim 1 are also in condition for allowance. Reconsideration and withdrawal of the rejections to claims 1-3, 5-35, 37-43, 46-60, and 66-68 are respectfully requested.

Withdrawn claim 76 depends from claim 26 and withdrawn claim 77 depends from claim 46. As claims generic claims 26 and 46 are now in condition for allowance, Applicants respectfully request rejoinder and allowance of claims 76 and 77.

In view of the above, it is respectfully submitted that the present application is in condition for issuance. Such action is solicited. If for any reason the Examiner feels that consultation with Applicants' attorney would be helpful in the advancement of the prosecution, the Examiner is invited to call the telephone number below.

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Respectfully submitted,


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